Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of claims:

1-78 (Canceled)

79. (New) A method for preventing leakage into a perigraft space between an endovascular graft that has been implanted in the lumen of a blood vessel of a human or veterinary patient and an adjacent portion of the blood vessel wall, said method comprising the steps of:

(A) providing a device comprising a solid member having expansile polymeric material disposed thereon, said expansile polymeric material being i) initially in a non-expanded state wherein a quantity of the polymeric material occupies a first volume and b) subsequently expandable to an expanded state wherein said quantity of the polymeric material occupies a second volume larger than the first volume and absorbs blood;

(B) inserting a cannula into a perigraft space between the endovascular graft and the blood vessel wall;

(C) introducing the device through the cannula and into the perigraft space while the expansile polymeric material is substantially in its non-expanded state;

(D) allowing the polymeric material to expand to its expanded stated within the perigraft space such that the device substantially fills the perigraft space.

80. (New) A method according to Claim 79 wherein i) the adjacent portion of the blood vessel wall is aneurysmic; ii) the endovascular graft is implanted within the blood vessel such that it extends through the aneurysmic portion of the blood vessel and defines a perigraft space between the graft and the aneurysmic wall of the blood vessel; and, iii) the

device is introduced into the perigraft space where the expansile polymeric material expands to substantially fill the perigraft space.

81. (New) A method according to Claim 80 wherein the total volume of non-expanded expansile polymeric material introduced in Step C is predetermined to substantially fill the perigraft space after it has been allowed to expand in Step D.

82. (New) A method according to Claim 79 wherein the expansile polymeric material is radiopaque.

83. (New) A method according to Claim 82 wherein the expansile polymeric material is rendered radiopaque by the incorporation of radiopaque monomers.

84. (New) A method according to Claim 79 wherein the polymeric material expands to its expanded state when the pH of its environment is a physiological pH of about 7.4.

85. (New) A method according to Claim 79 wherein the polymeric material is in the form of pellets when introduced through the cannula.

86. (New) A method according to Claim 79 wherein the solid member is an elongate member.

87. (New) A method according to Claim 86 wherein the solid member is filamentous.

88. (New) A method according to Claim 86 wherein a plurality of pieces of the polymeric material are disposed at spaced-apart locations on said elongate solid member.

89. (New) A method according to Claim 88 wherein the device further comprises coil spacers disposed on said solid member between pieces of the expansile polymeric material.

90. (New) A method according to Claim 79 wherein the solid member is formed of platmium.

91. (New) A method according to Claim 79 wherein the solid member is formed of platinum and tungsten.

92. (New) A method according to Claim 79 wherein the solid member is formed of wire.

93 (New) A method according to Claim 79 wherein the solid member is formed of polymeric material.

94 (New) A method according to Claim 93 wherein the solid member is formed of a polymer filament.

95 (New) A method according to Claim 94 wherein the solid member is formed of a polyvinyl alcohol filament.

96 (New) A method according to Claim 79 wherein the solid member is biased to a coiled configuration.

97. (New) A method according to Claim 79 wherein the cannula is advanced through the lumen of a catheter.

98. (New) A method according to Claim 97 wherein the catheter is a microcatheter.

99. (New) A method according to Claim 98 wherein the microcatheter has a lumen of 0.005-0.050 inch diameter.

100. (New) A method according to Claim 79 wherein the device is initially attached to a delivery member by way of a detachable connection, said delivery member being useable to advance the device into the perigraft space, said detachable connection being thereafter detachable such that the delivery member may be retracted into the cannula while the device remains in the perigraft space.

101. (New) A method according to Claim 79 wherein the polymeric material expands more rapidly as the pH of its environment increases.

102. (New) A method according to Claim 79 wherein the polymeric material is a hydrogel.

103. (New) A method according to Claim 79 wherein the polymeric material is porous when in its expanded state.

104. (New) A method according to Claim 103 wherein the porous polymeric material, when substantially fully expanded, has pores of about 50-1000 microns in diameter.

105. (New) A method according to Claim 103 wherein the porosity of the polymeric material, when substantially fully expanded, is at least about 50%.

106. (New) A method according to Claim 103 wherein the porosity of the polymeric material, when substantially fully expanded, is between about 50% and about 95%.

107. (New) A method according to Claim 79 wherein the graft is implanted prior to performance of Step B.

108. (New) A method according to Claim 107 wherein Step B further comprises:

causing the distal end of the cannula to enter the perigraft space by penetrating through a portion of the graft.

109. (New) A method according to Claim 107 wherein Step B further comprises:

causing the distal end of the cannula to enter the perigraft space by advancing through tissue of the patient's body, through the wall of the blood vessel adjacent to the graft and into the perigraft space.

110. (New) A method according to Claim 107 wherein Step B further comprises:

passing a substantially hollow needle through tissues of the patient's body and through the wall of the blood vessel adjacent to the perigraft space; and,

advancing the cannula through the needle such that the distal end of the cannula enters the perigraft space.

111. (New) A method according to Claim 79 wherein the cannula is substantially rigid.

112. (New) A method according to Claim 79 wherein the cannula is substantially flexible.

113. (New) A method according to Claim 79 wherein the cannula comprises a metal tube.

114. (New) A method according to Claim 79 wherein the cannula comprises a plastic tube.

115 (New) A method according to Claim 79 wherein the method is performed after an endoleak has been detected as a means of treating the endoleak.

116. (New) A method according to Claim 79 wherein the method is performed before an endoleak has been detected as a means for preventing an endoleak from occurring.

117. (New) A method according to Claim 79 wherein Step B comprises:

advancing a catheter to a first position within the patient's vasculature; and,

advancing the cannula through the catheter to a second position wherein the distal end of the cannula is within the perigraft space.